GAO

Report to the Subcommittee on the Census, Committee on Government Reform, House of Representatives

December 1999

## 2000 CENSUS

Contingency Planning Needed to Address Risks That Pose a Threat to a Successful Census

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December 14, 1999

The Honorable Dan Miller Chairman The Honorable Carolyn B. Maloney Ranking Minority Member Subcommittee on the Census Committee on Government Reform House of Representatives

Taking a complete and accurate census is an enormous and costly endeavor. For the 2000 Census, the Bureau of the Census estimates it will need to properly locate and collect information on more than 270 million residents living in about 119 million housing units. To do this, the Bureau expects to open over 520 local census offices; fill about 1.35 million temporary positions; receive, at peak, from 40 to 70 million questionnaires; process about 1.5 billion pages of data; and use more than 20 million maps for fieldwork. The Bureau estimates that the cost of the 2000 Census will be at least \$6.8 billion. This represents an increase of 113 percent in real terms over the \$3.2 billion cost of the 1990 Census in 1999 dollars. When measured on a cost-per-housing unit basis, the 2000 Census will cost an estimated \$57 per housing unit in 2000 compared to about \$31 in 1990 (in 1999 dollars), which is an increase of 84 percent.

The 1990 Census was the most costly census in U.S. history and data were less accurate than the 1980 Census, leaving millions of Americans—especially members of minority groups—uncounted. Throughout this decade, the Bureau has aggressively planned and implemented a census in 2000 that seeks to address the problems with prior censuses. Despite the Bureau's efforts, however, our work in recent years has continued to show that formidable challenges surround key census-taking operations. In February 1997, our findings led us to conclude that there is a high risk that the 2000 Census will be less accurate and more costly than previous censuses.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Of the \$6.8 billion, \$4.5 billion is budgeted for fiscal year 2000. For more information on the Bureau's fiscal year 2000 budget request, see 2000 Census: Analysis of Fiscal Year 2000 Amended Budget Request (GAO/AIMD/GGD-99-291, Sept. 22, 1999).

<sup>&</sup>lt;sup>2</sup>See <u>GAO High-Risk Series: Quick Reference Guide</u> (GAO/HR-97-2, Feb. 1997) and <u>GAO Performance</u> and <u>Accountability Series: Major Management Challenges and Program Risks – Department of Commerce</u> (GAO/OCG-99-3, Jan. 1999).

Two of our long-standing concerns in this regard have been the need to boost the declining level of public participation in the census—a significant problem that is certainly beyond the Bureau's ability to control—and the Bureau's need to collect timely and accurate data from nonrespondents. As agreed with your offices, we reviewed the Bureau's progress in reducing the risks that these challenges pose to a successful census.

### Results in Brief

With less than 4 months remaining until Census Day (Apr. 1, 2000), significant operational uncertainties continue to surround the Bureau's efforts to increase participation in the census and to collect timely and accurate field data from nonrespondents. These uncertainties raise concerns that the 2000 Census may be less accurate than the 1990 Census.

#### **Operational Uncertainties Surround the 2000 Census**

#### Motivating Public Participation Will Be a Formidable Task

- •Achieving the Bureau's mail response rate objective will be difficult
- •Outreach and promotion program may have only a modest impact on the mail response rate

#### Field Follow-up Efforts Will Be Costly and May Produce Unreliable Data

- •Operational challenges could undermine nonresponse follow-up efforts
- •The Bureau may be challenged to meet field staffing goals
- $\bullet Post\text{-}census$  day coverage improvement initiatives offer little hope of resolving the undercount

Key to a successful census is the level of public participation, as measured by the questionnaire mail response rate. A high mail response rate helps the Bureau obtain more accurate census data and reduce its costly nonresponse follow-up workload. However, the response rate has been declining since 1970, in part because of various demographic and attitudinal factors, such as more complex housing arrangements and public mistrust of government.

The Bureau estimates that, partly on the basis of its experience in the 1998 dress rehearsal for the 2000 Census, it will achieve a 61-percent mail

response rate in 2000. However, this goal may be optimistic for at least two reasons. First, a key ingredient of the dress rehearsal mail response rate—a second "replacement" questionnaire—will not be used in 2000 because the Bureau is concerned that the questionnaire could confuse recipients, which could lead to duplicate responses. Second, while the Bureau has instituted an extensive outreach and promotion effort to help it achieve its desired response rate, dress rehearsal results suggest that the Bureau still has not resolved the long-standing challenge of motivating public participation in the census.

The Bureau's ability to complete its field operations on time without compromising data quality is another significant risk to a successful census. Past experience has shown that following up on nonresponding households is one of the most error-prone and costly of all census-taking activities. For 2000, the Bureau estimates that it will need to fill about 860,000 positions for nonresponse follow-up and other peak field operations. To fill this many positions, the Bureau plans to recruit 3.5 million people, which is a number roughly equivalent to the population of South Carolina.

Moreover, even if the Bureau achieves its 61-percent mail response rate objective, it will have a nonresponse follow-up workload of 46 million housing units. To complete this workload in the 10-week time frame that the Bureau has allocated, it will need to close an average of 657,000 cases every day. However, a lower-than-expected mail response rate, difficulties in recruiting a sufficient number of workers in a tight labor market—despite the Bureau's recruiting efforts and offers of competitive, geographically based pay wages—and a variety of other factors, could undermine the Bureau's efforts and result in higher costs and less accurate data. Finally, while the Bureau has established post-census coverage improvement procedures to improve the accuracy of the 2000 Census data, these procedures are similar to 1990 methods that had limited success.

Given the operational uncertainties surrounding public participation in the census and the Bureau's field follow-up operations, we recommend that the Bureau develop contingency plans to mitigate the impact of a lower-than-expected response rate. This recommendation is consistent with suggestions we made in our 1992 summary assessment of the 1990 Census.³ Congress may also wish to consider opportunities to expand the potential census applicant pool. The Bureau has worked with other agencies to identify and implement several important provisions to expand

<sup>&</sup>lt;sup>3</sup>Decennial Census: 1990 Results Show Need for Fundamental Reform (GAO/GGD-92-94, June 9, 1992).

the census labor pool. Additional opportunities include, for example, legislative actions to remove financial disincentives that could discourage a wide range of people from seeking census employment, including recipients of Social Security, veterans healthcare, food stamp, Medicaid, and Temporary Assistance for Needy Families benefits, federal and military retirees, and others.

## Background

A successful census is critical because, as required by the Constitution, census data are used to reapportion seats in the House of Representatives. In addition, every year, the government awards around \$180 billion in federal funds to localities on the basis of census numbers, and states use census data, among other purposes, to redraw the boundaries of congressional districts. Businesses and private citizens also depend on census data for such purposes as marketing and planning. Census Day is April 1, 2000, with peak efforts to follow up on nonresponding households scheduled to run from April 27 to July 7, 2000. Population counts to be used to reapportion seats in the House of Representatives are to be delivered to the President by January 1, 2001.

In 1998, the Bureau conducted a dress rehearsal for the 2000 Census during which it tested most of the procedures and operations planned for the decennial census under as near census-like conditions as possible. The dress rehearsal was the Bureau's last opportunity for an operational test of its overall design of the 2000 Census and to demonstrate to Congress and other key stakeholders the feasibility of its plans. (Dress Rehearsal Census Day was April 18, 1998). The dress rehearsal sites included Sacramento, CA; 11 county governments and the City of Columbia, SC; and Menominee County, WI, including the Menominee American Indian Reservation.

## Scope and Methodology

To review the Bureau's efforts to increase public participation in the census and to collect timely and accurate field data from nonrespondents, we examined documents that described the Bureau's budget, plans, procedures, progress, and evaluations relating to these operations. Further, we examined current laws, regulations, and legislation pertaining to staffing the Bureau's field operations. We also interviewed Bureau officials at headquarters and, where applicable, regional and local census officials responsible for planning and implementing the 1998 dress rehearsal and the 2000 Census.

To obtain a local perspective on the Bureau's outreach and promotion and field follow-up efforts during the dress rehearsal, we made several site visits to the dress rehearsal jurisdictions and interviewed local officials who were responsible for organizing and implementing community

outreach and promotion efforts. We also inspected each site for the scope and prominence of promotional material and activities, and observed nonresponse follow-up operations. To determine the dollar effect of a 1 percentage point decrease in the mail response rate, we reduced the assumed mail response rates used in the Bureau's cost model supporting its fiscal year 2000 amended budget request.

We did our audit work at the Bureau's Census 2000 dress rehearsal sites; Regional Census Offices in Charlotte, NC, and Seattle, WA; Bureau headquarters in Suitland, MD; as well as in Washington, D.C., between April 1998 and October 1999, in accordance with generally accepted government auditing standards.

We requested comments on a draft of this report from the Secretary of Commerce. On December 3, 1999, the Secretary forwarded the Bureau's written comments on the draft (see app. I), which we address at the end of this report.

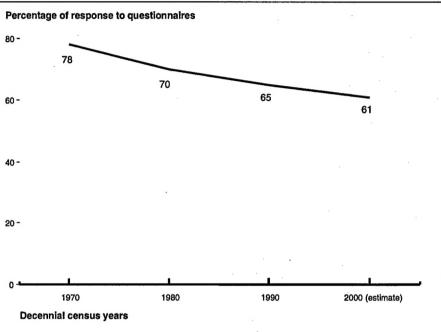
## Motivating Public Participation Will Be a Formidable Task

- •Achieving the Bureau's Mail Response Rate Objective Will Be Difficult
- •Outreach and Promotion Program May Have Only a Modest Impact on the Mail Response Rate

Public participation is critical to a successful census because it helps improve the accuracy and completeness of census information, while reducing the Bureau's costly and time-consuming nonresponse follow-up workload. The mail response rate to the census questionnaire is the most commonly used indicator of the level of public participation. Unfortunately, as shown in figure 1, the mail response rate has declined with each decennial census since the Bureau first initiated a national mailout/mailback approach in 1970.

<sup>&</sup>lt;sup>4</sup>The mail response rate is calculated by dividing the total number of questionnaires returned by the total number of questionnaires delivered (either by mail or by enumerators).

Figure 1: Census Questionnaire Mail Response Rates Have Been Steadily Declining



Source: U.S. Census Bureau.

According to the Bureau, this declining trend is due, in part, to various demographic, attitudinal, and other factors, such as concerns over privacy and mistrust of government. These and related issues led us to note, in our 1992 summary assessment of the 1990 Census, the formidable challenges the Bureau faces in increasing public cooperation. We identified several opportunities for improvements in this regard. One of these opportunities was to simplify the census questionnaire—which the Bureau has successfully done. However, even with a simplified questionnaire and other changes in census design, we noted the Bureau needed to prepare for a lower mail response rate in 2000.

For the 2000 Census, the Bureau is expecting a 61-percent mail response rate, which is 4 percentage points lower than what it achieved in 1990. However, the dress rehearsal results suggest that even this goal may be optimistic. First, while the Bureau generally achieved its mail response rate goals during the dress rehearsal, it did so only by mailing out a second, "replacement" questionnaire, which is an approach the Bureau has since dropped for 2000. Second, the Bureau's outreach and promotion program does not appear to have bridged the gap that typically exists

<sup>6</sup>GAO/GGD-92-94.

between raising awareness of the census on the one hand and motivating people to respond on the other. The significant difficulty in both raising public awareness and motivating people to mail back their questionnaires was demonstrated during the 1990 Census, when Bureau research showed that although 93 percent of the public reported being aware of the census, the mail response rate was just 65 percent.

### Achieving the Bureau's Mail Response Rate Objective Will Be Difficult

The dress rehearsal results raise concerns as to whether the Bureau can achieve its 61-percent mail response rate goal in 2000. As shown in table 1, the Bureau generally met its dress rehearsal mail response rate objectives, exceeding its goal by three percentage points in Sacramento and falling slightly short in South Carolina and Menominee.

Table 1: Dress Rehearsal Mail Response Rates

	Data collection	Response rate	Actual response
Site	strategy	goal	rate
South Carolina	Mailout/Mailback	55%	55%
	. Update/Leave	55	48
	Overall	55	53.4
Sacramento, CA	Mailout/Mailback	50	53
Menominee, WI	Update/Leave	40	39

Note: In mailout/mailback areas, housing units are to receive all questionnaires and related material by mail, and are to return completed questionnaires by mail. In update/leave areas, enumerators are to deliver questionnaires to housing units while updating the Bureau's master address list. Residents at these housing units are to then return completed questionnaires by mail.

Source: U.S. Census Bureau.

However, a key ingredient of these response rates was the Bureau's use of a second, "replacement" questionnaire that was sent to all housing units located in mailout/mailback areas in South Carolina and Sacramento. The Bureau has since rejected this procedure because it concluded that the number of duplicate responses suggested that the second mailing confused the public. Bureau officials told us that a similar situation in 2000 could cause overwhelming processing problems.

Recognizing the potential impact of not using a second mailing, the Bureau reduced its initial goal of a 67-percent mail response rate by 6 percentage points to 61 percent. However, the results of a subsequent Bureau study suggest that the second mailing during the dress rehearsal had an even greater impact on the mail response rate, and, as a result, the Bureau's current 61-percent response rate objective could be optimistic.

Although the impact of the second questionnaire is difficult to measure precisely, as shown in table 2, the Bureau estimates that the second questionnaire added between 8.2 and 15.8 percentage points to the South

Carolina response rate, and between 7.5 and 14.4 percentage points to the Sacramento response rate. Thus, without the second mailing, it is likely that the Bureau would have fallen far short of its response rate goals—by at least 8.2 percentage points in South Carolina and 4.5 percentage points in Sacramento.

Table 2: Impact of Second Questionnaire on Dress Rehearsal Mail Response Rates

	Response rate goal	Actual response rate	increase from second mailing	Response rate without second mailing
Site*				
South Carolina	55%	55%	8.2 - 15.8%	≤46.8%
Sacramento, CA	50	53	7.5 – 14.4	≤45.5

<sup>\*</sup>The Menominee, WI, dress rehearsal site is not shown in this table because it did not test the mailout/mailback data collection strategy and, thus, was not used to test a second questionnaire mailing.

Source: GAO analysis of U.S. Census Bureau data.

Dress rehearsal mail response rates are not necessarily predictive of decennial response rates, which are higher because of the greater public and media attention that the actual census receives. Nevertheless, the dress rehearsal mail response rates provide a useful indication of what might occur during the actual census and, for 2000, raise concerns that the Bureau is at risk of an even lower response rate than it had estimated.

<sup>&</sup>lt;sup>6</sup>According to a Bureau evaluation, the lower bound represents the percentage of housing units that mailed back only the replacement questionnaire. The upper bound represents the percentage of housing units that mailed back (1) the initial questionnaire after the second was sent, (2) the replacement questionnaire, or (3) both.

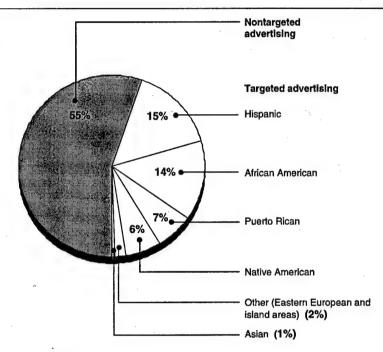
Outreach and Promotion Program May Have Only a Modest Impact on the Mail Response Rate

Paid Advertising May Have a Limited Effect on Census Participation To help combat the downward trend in response rates, the Bureau has instituted both a national and locally based outreach and promotion program. Two key components of the Bureau's outreach and promotion program include a paid advertising campaign and partnerships with local governments.

In October 1997, the Bureau hired a consortium of private-sector advertising agencies, led by Young & Rubicam, to develop an extensive paid advertising program for the 2000 Census. Marketing the census represents a particular challenge in that advertisers typically target their best prospects and specific segments of the population. In contrast, census advertising is aimed at the most resistant "customers" and every U.S. household.

The Bureau estimates it will spend about \$167 million on the paid advertising campaign in fiscal years 1998 through 2000, of which \$102.8 million (62 percent) has been allocated in fiscal years 1999 and 2000 for media (television, radio, print, and other types of advertising). A substantial portion of the advertising is to be directed at minority groups. Through the end of fiscal year 1999, for example, of the \$16.4 million allocated for media purchases, about \$7.3 million (45 percent) was to be used to target specific race and ethnic groups (see fig. 2). The Bureau has not yet purchased advertising for 2000, although a similar spending pattern is likely.

Figure 2: Percentage of Advertising Budget Allocated to Targeted Ethnic Groups Through the End of Fiscal Year 1999



Source: U.S. Census Bureau.

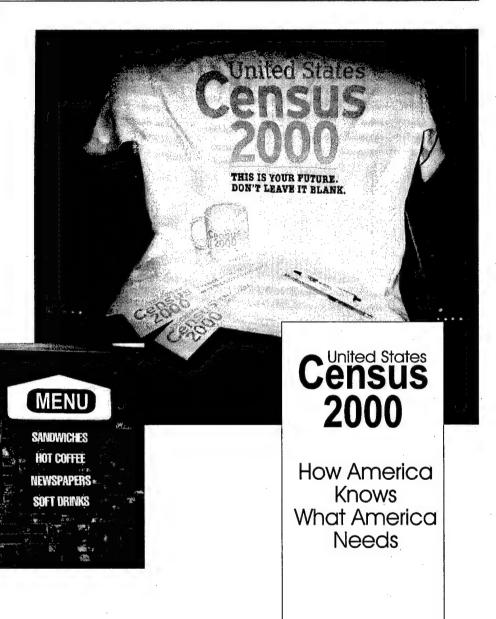
According to Bureau officials, the paid advertising campaign is intended to motivate people to return their census forms by using a variety of media to stress the message that participating in the census benefits one's community. We observed this during our visits to the dress rehearsal sites where we often saw billboards containing such taglines as "This is Your Future. Don't Leave It Blank," "The Future Takes Just a Few Minutes to Complete," and "Pave a Road With These Tools" (see fig. 3). The census was also publicized through broadcast and print media and promotional items, such as cups and T-shirts.

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Figure 3: Paid Advertising Campaign

A community benefits theme, along with the Bureau's desire for uniform messages and graphics, is evident in these examples of outdoor advertising and other promotional media, such as T-shirts, bumper stickers, and bookmarks.



http://www.census.gov



Nevertheless, the effectiveness of the paid advertising campaign appears to have been limited during the dress rehearsal. An independent research firm, which the Bureau hired to evaluate the effectiveness of the advertising campaign, reported that the campaign generally had no more than a "modest" impact on the public's attitudes and knowledge of the census. Although the Bureau had expected a 30 percentage point increase in awareness at the South Carolina and Sacramento dress rehearsal sites, the evaluation results indicated that there already was a high level of census awareness among all demographic groups before the start of the advertising campaign. In a telephone survey of residents that was conducted before the advertising campaign, 86 percent of those responding in Sacramento and 93 percent of South Carolina respondents said that they had heard of the census. (The Bureau believes that events occurring before the start of the advertising campaign, such as news coverage about the census approach, among other factors, may have contributed to the high level of awareness observed before the start of the advertising campaign). Following the advertising campaign, awareness levels increased by 8 percentage points in Sacramento and 5 percentage points in South Carolina (minority groups, the less educated, and the less affluent experienced a greater increase in awareness).

Significantly, much like the 1990 Census, the public's high level of awareness was not matched by similarly high mail response rates. As previously discussed, at the South Carolina and Sacramento dress rehearsal sites, the mail response rates were about 55 percent.

Following the dress rehearsal, the Bureau expanded and enhanced the paid advertising campaign, in part by adding messages that are to run prior to, and following Census Day. The campaign, which is to run from November 1999 through late-May 2000, is divided into three phases: educational, motivational, and nonresponse follow-up. The phases will be similar in that they will all contain messages about census benefits and confidentiality. In addition, the motivational phase, timed to coincide with the census questionnaire mailings, is to let people know to expect the census form and to mail it back. The nonresponse follow-up phase, which is to occur when the Bureau is going door-to-door collecting data from nonrespondents, is to encourage people to cooperate with census enumerators.

Still, the impact that this additional advertising might have on people's willingness to respond to the census is difficult to gauge. According to the Bureau, there did not appear to be a direct relationship between advertising exposure during the dress rehearsal and the likelihood of

returning a census form. However, the Bureau suspects that the campaign had an "indirect effect" on public response to the census in that the campaign may have made people expect the census form in the mail, which, in turn, increased the likelihood that they would return it. Moreover, as noted earlier, even though the advertising campaign for 2000 has been greatly enhanced since the dress rehearsal, high levels of awareness do not guarantee high mail response rates.

Mismatch Between Bureau Expectations and Local Governments' Capabilities Could Undermine Partnership Efforts In addition to the paid advertising campaign, the Bureau is seeking to form partnerships with local governments, community groups, businesses and nongovernmental organizations to promote the census on a grassroots basis. The Bureau has allocated \$108 million for its partnership initiatives in fiscal years 1999 and 2000.

A key element of the Bureau's local partnership effort will be Complete Count Committees, which are to consist of local government, religious, media, education, and other community leaders. The committees are to promote the census by sponsoring promotional events, placing articles in local newspapers, and holding press conferences that convey the importance of the census, among other activities. For 2000, as a matter of long-standing policy, the Bureau is not directly funding local outreach and promotion activities. Instead, for fiscal years 1999 and 2000, the Bureau is to distribute about \$1.2 million to each of the Bureau's 12 Regional Census Centers for in-kind services, such as printing handouts. The Bureau also plans on assigning employees, known as partnership specialists, to work with local groups to help them initiate and sustain grassroots marketing activities, such as the Complete Count Committees.

The Complete Count Committee program stems from the Bureau's recognition that the paid advertising campaign alone will not get the message across to everybody—particularly the hard-to-count—that participating in the census is important. The Bureau hopes that local people who are trusted by members of the community can more effectively market the census to those who are difficult to convince through traditional advertising media. Thus, while the Bureau plans on partnering with a number of religious, service, community, and other organizations—often to increase census participation among certain groups or areas—the Bureau believes that Complete Count Committees are the key to making

<sup>&</sup>lt;sup>1</sup>See Census 2000 Dress Rehearsal Evaluation Results Memorandum E1b, <u>Effectiveness of the Paid Advertising Campaign: Reported Exposure to Advertising and Likelihood of Returning a Census Form, U.S. Census Bureau, April 1999.</u>

each and every community aware of the census and persuading everyone to respond.

However, during the dress rehearsal, we found that the effectiveness of the Complete Count Committee program was undermined by an apparent mismatch between the Bureau's expectations of the committees and what the committees could realistically accomplish with their limited resources. While the Bureau expected local governments to plan and execute an outreach and promotion program largely on their own with minimal direct support from the Bureau, we found that many local governments lacked the money, people, and/or expertise to launch an adequate marketing effort during the dress rehearsal. If such expectations remain misaligned for 2000, these disappointing results could continue.

Regarding money, officials representing 9 of the 14 local governments participating in the dress rehearsal told us that they were unable or unwilling to fund promotional activities. For example, while the Sacramento committee initially developed a list of several dozen promotional activities involving local media and other organizations, a committee representative told us that many activities were dropped because of a lack of money. Although the Bureau encouraged committees to turn to local businesses for support, the committees (1) were generally too small to organize an effective outreach effort or (2) viewed such an effort as a federal function. As one South Carolina committee representative said, "Fundraising for the federal government doesn't go over well.... That's what taxes are for."

The Bureau may also have overly optimistic expectations of the level of staff and expertise available at the local level to plan and implement outreach and promotion activities. This was evident during the dress rehearsal where some local governments had difficulty getting staff to volunteer to help plan and organize promotion activities. At the South Carolina and Menominee sites, for example, some local officials expressed frustration and others resentment for what they perceived as the burden of promoting the census and the time it was taking from their other responsibilities. In addition, local governments may lack the know-how to launch an effective marketing effort. During the dress rehearsal, for example, the Bureau's South Carolina partnership specialist said that the Bureau assumed that the South Carolina counties had the experience and knowledge to market the census. However, she noted that, in hindsight, the opposite was often the case in those counties.

In addition, while the Bureau's partnership specialists are to provide needed expertise and assistance to local governments and other groups, the dress rehearsal suggested that these specialists may be spread too thin to offer meaningful support in 2000. In our past work, we reported that some South Carolina committees never formed, while others became inactive, partly because the Bureau's two partnership specialists were responsible for assisting 11 county governments and the City of Columbia—a geographic area covering more than 6,700 square miles.

In 2000, the partnership specialists will likely have a far greater workload. The Bureau plans to fill 542 partnership specialist positions to assist local governments. According to the Bureau, as of the end of July 1999, about 6,800 local governments had formed Complete Count Committees, (including 50 of the 51 largest cities). The Bureau expects that as many as 8,000 committees will ultimately be formed. Thus, on average, each partnership specialist could be responsible for assisting between 13 and 15 local governments. By comparison, the problems we observed at the South Carolina dress rehearsal site occurred when each partnership specialist was responsible for assisting an average of six local entities.

Further, as local governments have been forming Complete Count Committees for the 2000 Census, early indicators suggest that the potential impact of this program may not be fully realized. For example, the effectiveness of the Complete Count Committee program will be partly determined by the number of governments that decide to participate. In the spring of 1998, the Bureau formally invited all 39,000 local and tribal governments in the United States to establish such committees. Although the Bureau did not expect that all 39,000 local governments would do so, the 6,800 committees formed so far represent about 40.4 million people—or only 16 percent of the U.S. population. Moreover, those local governments that do not form Complete Count Committees could add to the partnership specialists' workload, because the partnership specialists will need to develop some other method of publicizing the census in those locations.

<sup>&</sup>lt;sup>8</sup>2000 Census: Preparations for Dress Rehearsal Leave Many Unanswered Questions (GAO/GGD-98-74, Mar. 26, 1998).

## Field Follow-up Efforts Will be Costly and May Produce Unreliable Data

- •Operational Challenges Could Undermine Nonresponse Follow-up Efforts
- •The Bureau May Be Challenged to Meet Field Staffing Goals
- •Post-Census Day Coverage Improvement Initiatives Offer Little Hope of Resolving the Undercount

The Bureau implements a nationwide field follow-up operation in an attempt to count those individuals who did not mail back their census questionnaires. Specific activities include (1) nonresponse follow-up, during which temporary Bureau employees, known as enumerators, visit and collect census information from each nonresponding housing unit and (2) additional coverage improvement initiatives, which are aimed at collecting data from people missed during the initial enumeration and nonresponse follow-up.

According to the Bureau, even if it achieves its anticipated 61-percent mail response rate, enumerators will need to follow up with 46 million nonresponding housing units. However, completing this workload in the 10-week time period the Bureau has allotted for nonresponse follow-up, without compromising data quality, could prove extremely difficult.

During the 1990 Census, for example, field follow-up operations proved to be error-prone and costly, in part because a higher than expected nonresponse follow-up workload required the Bureau to hire more enumerators than originally anticipated. However, some local census offices could not meet the demand for additional enumerators, which delayed the completion of nonresponse follow-up. As the time spent on data collection dragged on, the rate of errors appeared to increase because people moved or could not recall who had been residing at their home on Census Day. Furthermore, to complete nonresponse follow-up, enumerators collected data from secondhand sources, such as neighbors and mail carriers—referred to as "proxy" data. However, the Bureau—on the basis of its work evaluating past census operations—has found that proxy data are not as reliable as data obtained directly from household residents.

In addition, field follow-up operations are expensive. The Bureau estimates that, in 2000, the cost to enumerate a household that mails back the census questionnaire will be about \$3. For those households that do not return a

questionnaire—requiring enumerators to obtain the information—costs could be as high as \$35 per questionnaire.

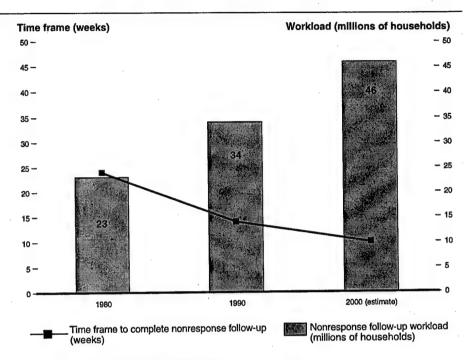
## Operational Challenges Could Undermine Nonresponse Follow-up Efforts

Completing Nonresponse Follow-up on Schedule Without Compromising Data Quality May Be Difficult The combined challenges that affected the success of the Bureau's 1990 nonresponse follow-up operations—completing nonresponse follow-up on time, maintaining data quality, and recruiting a sufficient number of enumerators—may pose similar, if not greater, challenges for the Bureau in 2000.

For the 2000 Census, the Bureau has based its \$1.5 billion nonresponse follow-up budget on the assumption that it will achieve a 61-percent mail response rate, which corresponds to a follow-up workload of about 46 million of the 119 million housing units estimated to comprise the nation. However, given the Bureau's experiences during past censuses, it will be challenged to complete the nonresponse follow-up workload on time and minimize the collection of proxy data.

For example, during the 1990 Census, because of unanticipated workload, staffing, and scheduling problems, it took the Bureau 14 weeks to complete nonresponse follow-up on 34 million housing units—8 more weeks than the 6-week period that the Bureau initially estimated for that operation. For 2000, the Bureau has scheduled 10 weeks to follow up on an expected 46 million housing units. Under this timetable, the Bureau has 4 weeks less time to follow up on 12 million more households, when compared to 1990 (see fig. 4).

Figure 4: The Bureau's Nonresponse Follow-up Workload Has Increased, While Time Frames Have Been Compressed



Source: GAO analysis of Census Bureau data.

Thus, to follow up on 46 million households within the 10-week time frame, the Bureau will need to complete over 657,000 cases each day for the entire 10-week period. In addition, the Bureau's quality assurance procedures, which call for enumerators to revisit certain households to identify and correct enumeration errors, will add more than 17,000 households to the Bureau's average daily workload. Maintaining this pace could prove difficult for a variety of factors that range from the availability of a productive, temporary workforce, to local weather conditions.

According to senior Bureau officials, a mail response rate as little as 2 or 3 percentage points less than the Bureau's 61-percent goal could cause serious problems. For example, according to Bureau officials, the Bureau has a limited number of needed materials for nonresponse follow-up. Furthermore, while the amount added to total field data collection costs as a result of any increased workload will ultimately depend on where this workload is located and how the Bureau manages its resources in completing this workload, additional costs could, nonetheless, be substantial.

Each percentage point drop in the mail response rate would increase the nonresponse follow-up workload by about 1.2 million households. In 1995, the Bureau estimated that a 1 percentage point increase in workload could add approximately \$25 million to the cost of the census. However, on the basis our analysis of fiscal year 2000 Bureau budget estimates, we project that a 1 percentage point increase in workload could add at least \$34 million in direct salary, benefits, and travel costs to the \$1.5 billion budgeted for nonresponse follow-up. This \$34 million in direct costs exclude, for example, indirect costs for headquarters and field support personnel, quality control operations, rent, and data processing, which may or may not be incurred. The Bureau's ability to absorb these additional costs in its fiscal year 2000 budget will be a function of the actual outcome of other assumptions, such as enumerator productivity, and the Bureau's ability to manage other uncertainties. Of course, a higher than expected mail response rate is possible and could result in significant savings, which the Bureau said it would use to augment its coverage improvement programs for hard-to-count populations.

Completing the nonresponse follow-up workload in a timely manner will be critical to the Bureau's collection of quality field data in 2000. According to Bureau officials, the Bureau does not plan to extend the nonresponse follow-up schedule as it did during the 1990 Census. They noted that the Bureau must meet the 10-week nonresponse follow-up schedule to have time to complete other census operations, including the coverage evaluations that will be used to estimate census under- and over-counts, and the processing and preparation of census data for publication. However, during the 1990 Census, enumerators collected proxy data before they had collected data from 95 percent of the cases within each predefined housing district, as required by Bureau procedures. Indeed, about 36 percent of the Bureau's district offices used proxy data when the caseload completion level was 90 percent or less. Just 16 percent of the district offices began collecting proxy data when the caseload was 95 percent or more complete.

During the dress rehearsal, while nonresponse follow-up operations were completed on schedule in both Menominee and Sacramento, and 6 days ahead of schedule in South Carolina, the Bureau found that obtaining interviews with household members proved to be more difficult than it had anticipated. As a result, the Bureau relied more heavily on proxy data than it had planned. Although the Bureau hoped to limit the portion of the nonresponse follow-up universe that was proxy data to less than 6 percent, the Bureau did not achieve this objective at any of the three dress rehearsal sites. In Sacramento, 20.1 percent of the occupied nonresponse

follow-up universe was proxy data; in South Carolina, the proportion was 16.4 percent, and in Menominee, it was 11.5 percent.

Because of the comparatively high use of proxy data, a Bureau evaluation of the dress rehearsal nonresponse follow-up operation noted that data quality, especially for the long-form questionnaire—which was somewhat more likely than the short form to be enumerated via proxy—was a concern. According to the evaluation, the data obtained from the long-form questionnaire are "especially suspect when obtained from a non-household member."

## The Bureau May Be Challenged to Meet Field Staffing Goals

A number of questions also surround the Bureau's ability to staff its nonresponse follow-up operations, which also has implications for timely and accurate field data collection. For example, while the Bureau was generally successful in staffing its dress rehearsal and initial census operations and kept turnover rates to manageable levels, the larger number of people the Bureau needs to hire in 2000, combined with a tight labor market and other factors, could pose problems.

The Bureau plans to fill about 860,000 positions for peak field operations. including 539,000 for nonresponse follow-up. To do this—on the basis of the anticipated workload and the fact that the vast majority of people offered a position may not accept a census job or may resign before work assignments are completed—the Bureau estimates it will need to recruit nearly 3.5 million applicants (a number roughly equivalent to the population of South Carolina). However, achieving this staffing goal will not be easy because the labor market has become increasingly tight. According to the Bureau, it took this factor into consideration in setting an assumed enumerator productivity rate of 1.03 households per hour, which is based on conservative senior management judgments. This assumed productivity rate represents a 20-percent reduction from an original assumption of 1.28 households per hour. Higher than expected productivity rates could reduce the Bureau's staffing needs. Nevertheless, as we have reported in the past, staffing the census could still be difficult because census jobs tend to be temporary and do not offer benefits, such as health or life insurance, sick or annual leave, retirement plans, and

The short-form questionnaire includes basic population and housing questions and is to be delivered to about 83 percent of all housing units in 2000. The long-form questionnaire includes the short-form questions, as well as additional questions on the social and economic characteristics of the population, and the physical and financial characteristics of the housing unit. The long form is to be delivered to a sample of housing units that make up the remaining 17 percent of the population.

childcare, and thus, may not be as attractive to applicants as other employment opportunities.<sup>10</sup>

While the Bureau's recruiting initiatives appeared to be effective during the dress rehearsal and early operations for the 2000 Census, the Bureau still encountered pockets of problems in specific geographic locations. For example, when the Bureau was conducting field operations to build the address list for the 2000 Census in the resort areas of Michigan's Upper Peninsula and Vail, CO, the Bureau was competing for workers during the seasonal vacation period. To help attract workers, the Bureau quickly responded by raising hourly wages. According to a Bureau official, the Bureau anticipates similar pockets of recruiting problems to occur during nonresponse follow-up operations in 2000. Thus, it will be important for the Bureau to monitor the progress of nonresponse follow-up and respond quickly so that it can attract needed staff.

To expand the applicant pool, the Bureau plans, among other things, to (1) focus its recruiting efforts on employed individuals seeking additional jobs, retirees, and homemakers, among others; (2) develop partnerships with state, local, and tribal governments, community groups, and other organizations to assist in recruiting efforts; (3) expand its employment advertising; and (4) use a geographic pay scale to set wages at 65 to 75 percent of local prevailing wages (from about \$8.25 to \$21.50 per hour) to help make census jobs more competitive.

The Bureau has also worked with other federal agencies to waive regulations and policies that restricted or financially discouraged certain groups of people from seeking census employment. As shown in table 3, the Department of Commerce has authorized the Bureau to bypass Commerce's policy preference against hiring noncitizens. Also, the Department of Housing and Urban Development (HUD) waived regulations that could have reduced the benefits for heads of households receiving housing assistance because the regulations would have required census income to be included in the calculations used to determine program eligibility. To make census employment more attractive to former and current federal employees, the Office of Personnel Management (OPM) used its authority to allow federal and military retirees, as well as current federal workers, to work on the census without reducing their benefits or income. (The requirement that military retirees are to receive

<sup>10</sup>GAO/GGD-98-74.

<sup>&</sup>quot;Immigration law and appropriation act restrictions must still be considered in determining noncitizen eligibility for temporary census employment.

reduced annuities upon federal reemployment was repealed by P.L. 106-65, effective Oct. 1, 1999.) Regarding current federal employees, over 80 federal agencies employing over 2.4 million workers have authorized that their employees may hold second appointments with the Bureau. GAO, seeking to do its part to help ensure a successful census, is participating in this initiative.

Although the precise impact these actions might have on census employment cannot be determined, the agencies' actions could expand the potential census applicant pool by millions of people.

able 3: Agencies Have Taken Actions to Expand the Census App  Agency action	Potential applicant*	Approximate number of people affected (millions)
In July 1999, Commerce authorized the Bureau to hire noncitizens, subject to annual appropriation act restrictions and immigration law. Previously, under Commerce policy, the Bureau could hire noncitizens only if there was a shortage of qualified U.S. citizens in a particular area.	Noncitizens who are legal permanent residents	≈6
In February 1998, OPM revised personnel regulations to allow federal employees working on the census to retain the retirement and insurance benefits to which they are entitled under their primary federal job, while earning additional wages in their second, census job. <sup>c</sup>	Civilian federal employees	≈2
In May 1996, HUD agreed to exclude census income from calculations used to determine eligibility for its public and assisted housing programs, including Indian housing assistance.	Heads of households receiving housing assistance	≈4
In April 1996, OPM delegated to the Bureau the authority to waive the requirement that federal civilian retirees reemployed by the federal government are to receive reduced salaries, while reemployed military personnel are to receive reduced annuities. Retirees can only obtain this exemption subject to the approval of key Bureau headquarters officials or Bureau regional directors.	Federal civilian annuitants	≈2

<sup>\*</sup>Potential applicant categories are not necessarily mutually exclusive.

<sup>\*</sup>According to OPM, since 1939, Congress has prohibited most federal agencies from using their appropriated funds to employ noncitizens within the United States. However, certain groups are currently excluded from this ban. They include (1) persons from countries allied with the United States in a defense effort; (2) citizens of Ireland, Israel, and the Republic of the Philippines; and (3) persons who owe permanent allegiance to the United States, such as natives of American Samoa.

Before this action, the Bureau would have had to work closely with each employee's agency to determine the amount of additional retirement deductions, as well as life and health insurance premiums, to withhold from the employee's paycheck, a potentially error-prone and administratively burdensome process, according to OPM.

<sup>&</sup>lt;sup>4</sup>See 5 U.S.C. 5532, 8344, 8468. The requirement that military retirees are to receive reduced annuities upon federal reemployment was repealed by Public Law 106-65, effective October 1, 1999.

During the 1990 Census, exemptions were made for recipients of public housing assistance and federal civilian and military retirees, and both actions helped expand the census applicant pool. According to the Bureau, about 20,000 federal and military retirees worked on the 1990 Census, which was 3.6 percent of the more than 550,000 people hired overall. Similarly, when the public housing assistance exemption was used in 1990, the Bureau found that it helped generate applicants in difficult-to-recruit areas, such as high crime, inner city areas, and Indian reservations.

#### Pending Legislation Could Expand the Census Applicant Pool

Congress is considering three pieces of legislation designed to improve the recruitment of temporary census workers. H.R. 683, S. 752, and S. 1588 are similar in that each would (1) exempt census income from calculations used to determine eligibility for, or the amounts payable under, any federal, state, or local program financed in whole or in part with federal funds and (2) provide a blanket exemption from income/annuity offset provisions for federal civilian annuitants and military retirees. As previously noted, this annuity offset requirement was repealed for military retirees by Public Law 106-65.

The legislation, if enacted, would remove financial disincentives that could discourage a wide range of people from seeking census employment. They include recipients of Social Security, veterans healthcare, food stamp, Medicaid, and Temporary Assistance for Needy Families benefits, as well as federal and military retirees.

The broadest of the measures—S. 1588—also includes financial incentives for volunteers who help with the census, namely: reimbursements for expenses, such as gasoline and food, and a program of undergraduate or graduate debt relief.

#### Opportunities Exist for Expanding the Census Applicant Pool Still Further

If enacted, the legislation could make census employment more attractive to millions of people. However, the bills contain restrictions that limit their applicability. In addition, other statutory provisions exist that prohibit or create financial disincentives for certain groups of people who might be interested in census employment.

Regarding the restrictions contained in the measures currently before Congress, the exemption in all three bills would not apply to federally funded program beneficiaries who were appointed to temporary census positions before January 1, 2000. This could discourage some people who had worked on early census-taking operations, such as address list development activities, from seeking further census employment.

At the same time, the census applicant pool is not as large as it could be because provisions contained in current laws continue to prohibit or potentially discourage large groups of people from considering census jobs. Although our review was not exhaustive, and we did not comprehensively weigh the pros and cons of each option, we identified three large sources of potential applicants who might be interested in census employment were it not for these provisions.

- Active duty military personnel. The Census Act allows uniformed personnel to take census jobs to enumerate members of the uniformed services.<sup>12</sup> However, active duty military personnel are generally not permitted to accept outside federal employment in the absence of specific statutory authority to do so.<sup>13</sup> Thus, additional statutory authority would be needed to authorize military personnel to work on the census. Doing so could increase the potential census applicant pool by over 1 million individuals.
- Recipients of federal government voluntary separation incentive payments. Since the early 1990s, as part of an effort to restructure the federal government, the Department of Defense and, later, civilian federal agencies, have had the authority to offer voluntary separation incentive payments (also known as buyouts) of as much as \$25,000 to eligible employees who left federal service. For nondefense agencies, Congress has authorized both governmentwide buyouts and over 15 agency-specific buyout programs. According to information provided by OPM, most of these buyout programs contain provisions that generally require buyout recipients to repay their buyout if they accept a federal job within 5 years of their separation date. According to Bureau officials, some buyout recipients have decided against census jobs because of the repayment requirement. Approximately 59,000 buyout recipients could potentially still be covered by these provisions during peak census field operations.
- Noncitizens from certain countries. Most federal agencies have
  historically been prohibited by statute from using their appropriated funds
  to employ noncitizens of the United States, with certain exceptions. A
  statutory exemption from this appropriations restriction (currently
  contained in section 605 of Public Law 106-58) exists that allows agencies
  to use appropriated funds to employ noncitizens in limited circumstances,
  such as for the temporary employment of translators or in the field service

<sup>12</sup>See 13 U.S.C. 24 (c).

<sup>13</sup>See 64 Comp. Gen. 395 (1985).

as a result of emergencies. According to Bureau officials, the Bureau has used this exemption to hire temporary workers in the past and is exploring its further use for the 2000 Census. Nevertheless, a broad statutory exemption from this appropriations restriction would make it easier for the Bureau to hire noncitizens from currently nonexempt countries, such as India, Pakistan, and Brazil. Many of these individuals could better enumerate members of their own community because some hard-to-enumerate foreign-born residents may feel more comfortable providing information to persons with whom they share a common cultural heritage.

Given the Bureau's past history of staffing problems, the magnitude of the Bureau's staffing challenge for 2000, and the importance of an adequate workforce to the collection of timely and accurate census data, it will be important for the Bureau to have as large an applicant pool as possible from which to hire census workers.

Post-Census Day Coverage Improvement Procedures Offer Little Hope of Resolving the Undercount The Bureau's post-census coverage improvement procedures planned for 2000, while designed to improve the census count, are similar to 1990 methods that had limited success. Bureau officials believe that these procedures represent the best the Bureau can reasonably do to enhance the accuracy of the census. However, these officials also said that they doubt that either the overall accuracy levels or differential undercount rates will show much improvement over 1990 levels because societal factors that led to a high undercount in 1990 are even more prevalent today.

Congress directed the Bureau to begin preparing for a traditional census in November 1997. However, the Bureau, awaiting the Supreme Court's decision on the legality of sampling, did not complete plans for a traditional census until January 1999, when the Supreme Court ruled that the Census Act prohibited the use of statistical sampling for purposes of determining the population count used to apportion the House of Representatives. As a result, according to Bureau officials, there was no time to conduct additional research to estimate the effectiveness of new coverage improvement procedures and, therefore, too much risk to justify implementing them. Thus, for 2000, the Bureau will primarily use postcensus coverage improvement procedures used in 1990, which added just 3.68 million persons (1.5 percent) to the population count.

Nevertheless, coverage improvement programs in the 1990 Census were costly and yielded data of uneven quality. For example, the Bureau's 1990

<sup>&</sup>lt;sup>14</sup>Department of Commerce v. U.S. House of Representatives, 525 U.S. 316 (1999).

Recanvass program—where enumerators did a second, post-Census Day canvass of addresses in selected neighborhoods to look for missed housing units—added 139,000 housing units to the census, which was 0.1 percent of the total, according to Bureau data. However, while the \$14.7 million program added 178,000 people to the decennial count, the Bureau later estimated that nearly 22 percent were added in error.

Overall, Bureau officials have acknowledged that post-census coverage improvement programs are expensive and do not always produce expected or hoped for results. Thus, it is unlikely that the Bureau's post-census coverage improvement programs—programs that had limited success in 1990—will address the overall and differential undercount in 2000.

### Conclusions

With less than 4 months until Census Day, the Bureau faces some significant risks that, taken together, continue to jeopardize the success of the 2000 Census. Securing an adequate level of public participation is a great challenge with implications for the size of the nonresponse follow-up workload. Having to complete an even greater nonresponse follow-up workload than anticipated, or difficulty in filling the number of enumerator positions that the Bureau estimates it will need for this operation, would have implications for scheduling as well as data quality. Because of these combined risks, the 2000 Census may be less accurate than 1990.

Given the operational uncertainties surrounding public participation in the census and the Bureau's field follow-up operations, it will be important for the Bureau to have contingency plans in place to mitigate the impact of a lower-than-expected response rate. Because of the little time remaining and the need for senior Bureau managers to devote the bulk of their attention to effective execution of the census plans already in place, such contingency plans will be most useful if they focus on the critical challenges and trade-offs that the Bureau will face—such as the need to balance schedule pressures with the need to protect data quality—if its response rate goals are not met. In addition, even though the Bureau has already taken steps to expand the census applicant pool, additional statutory measures could be needed, given the Bureau's past history of staffing problems and the magnitude of the Bureau's staffing challenge for 2000.

## Matters for Congressional Consideration

To help expand the census applicant pool, Congress may wish to consider legislative actions to modify legal provisions that potentially discourage or prohibit specific groups of people from seeking census employment. Options could include:

- expediting its consideration of H.R. 683, S. 752, and S. 1588, which among
  other things, would remove financial disincentives that could discourage
  recipients of Social Security, veterans healthcare, food stamp, Medicaid,
  and Temporary Assistance for Needy Families benefits, as well as federal
  and military retirees from seeking census employment;
- allowing active duty military personnel to hold temporary census employment;
- exempting former federal employees who received voluntary separation incentives (buyouts) from requirements to repay their buyout amount if they work on the census; and
- providing a statutory exemption from the appropriations restriction currently contained in section 605 of Public Law 106-58, for purposes of temporary census employment.

Although we recognize that each of these options entails policy, budgetary, and implementation considerations that would need to be addressed by Congress, they represent an initial list of options that Congress could consider to help reduce the Bureau's staffing burden.

## Recommendations

To help ensure an accurate and cost-effective census, we recommend that the Director, Bureau of the Census, develop a contingency plan of actions the Bureau can take to address the operational challenges that would result from a questionnaire mail response rate that is lower-than-anticipated. At a minimum, the Bureau's plan should address the budgetary, scheduling, staffing, and other logistical implications of collecting data from a larger number of nonresponding households. The contingency plan should also include options and procedures to balance the pressure to meet census schedules with the need to limit the use of proxy data. The Bureau should share its plan with Congress and others to demonstrate its preparedness for collecting accurate census data in the event of lower-than-expected levels of public cooperation with the census.

# Agency Comments and Our Evaluation

The Secretary of Commerce forwarded written comments from the Bureau of the Census on a draft of this report. Overall, the Bureau commented that the draft report conflicted with the intent of our earlier reports, which, according to the Bureau, concluded that there is little time to make final census design changes and to implement them, as Census Day approaches.

The Bureau noted that early in the decade, it recognized the challenges to conducting a complete and thorough nonresponse follow-up operation, and it planned to address these challenges using statistical sampling to adjust census population counts. However, as we noted in our draft, in January 1999, the Supreme Court ruled that the Census Act prohibited the

use of statistical sampling for purposes of determining the population count used to apportion the House of Representatives. Our draft also noted that according to the Bureau, there was insufficient time to develop, test, and implement new coverage improvement programs.

The Bureau also said that our contention that it has not sufficiently planned for potential shortcomings in nonresponse follow-up or outreach and promotion operations appears to contradict our September 1999 report on the Bureau's fiscal year 2000 amended budget request. <sup>16</sup> According to the Bureau, in that report, we characterized the Bureau's expectations of enumerator productivity during nonresponse follow-up, as well as the effectiveness of the advertising campaign, as being "generally conservative."

We revised the draft to include the language from our September report, which noted the Bureau's assumed enumerator productivity rate is 1.03 households per hour. This new assumed productivity rate represents a 20-percent reduction from an original assumption of 1.28 households per hour and was primarily based on senior management judgments—which the Bureau acknowledged are very conservative—about factors such as the uncertainty of hiring a sufficient number of quality temporary workers in a tight labor market. We also have added language to this report noting that higher-than-expected productivity rates could reduce staffing needs.

Our September report did not state that the Bureau's expectations of the impact of its outreach and promotion campaign are conservative. Rather, the September report states that the Bureau had no data available to support how much, if any, the Bureau's plans to increase the amount of census advertising would increase the response rate. Overall, the Bureau acknowledges that completing nonresponse follow-up on time, hiring and training needed staff, and implementing a successful outreach and promotion campaign will be a challenge—overriding themes of our report.

The Bureau further commented that there is inconsistent analysis supporting the conclusions in our draft. According to the Bureau, in some instances, the dress rehearsal is used to support certain conclusions (e.g., the mail response rate in 2000 will be difficult to achieve). In other cases, the Bureau notes that conclusions are drawn that directly contradict the dress rehearsal findings. We disagree with the Bureau's reading of the draft report. We were very careful in drawing the lessons from the dress rehearsal and applying them to the 2000 Census. For example, in

<sup>16</sup>GAO/AIMD/GGD-99-291.

discussing the challenges to motivating the public to respond to the census, we also noted that an augmented advertising campaign is planned for the 2000 Census and that mail response rates for the actual census tend to be higher than response rates obtained for a dress rehearsal. Regarding staffing, we noted that overall, the Bureau met its dress rehearsal staffing goals, but that the Bureau encountered pockets of problems in areas with especially difficult labor markets. The draft noted that due to the number of staff the Bureau will need to hire in 2000 and the historically tight labor market, the Bureau faces a substantial challenge—a view consistent with the Bureau's.

The Bureau's final comment concerned our recommendation calling on the Bureau to develop a contingency plan of actions it can take if it receives a lower-than-expected mail response rate to the census questionnaire. The Bureau noted that its paramount objective in the months remaining before Census Day is to implement the procedures and operations that have already been planned. The Bureau commented that the only serious contingency would be to request a supplemental appropriation.

We agree that the Bureau needs to concentrate on successfully implementing the procedures and operations already planned for the 2000 Census and, as our draft noted, a lower-than-expected mail response has major cost implications. Nevertheless, prudent management and past history suggest that developing a reasonable contingency plan is an appropriate course of action. Additional funding will not by itself make up for a lower-than-expected mail response rate. It is questionable whether the additional enumerators that the Bureau will need to complete the resulting increase in the nonresponse follow-up workload will be available given the staffing challenges described in our draft. By considering scheduling, data quality, staffing, and other logistical implications of a lower-than-expected mail response now—while time is still available—the Bureau could be better prepared to maintain the accuracy of census data.

We are sending copies of this report to the Honorable William M. Daley, Secretary of Commerce, and the Honorable Kenneth Prewitt, Director of the Bureau of the Census. Copies will be made available to others on request.

This report was prepared under the direction of J. Christopher Mihm, Associate Director, Federal Management and Workforce Issues. Please contact Mr. Mihm on (202) 512-8676 if you have any questions. Key contributors to this report are included in appendix II.

Nancy Kingsbury

Acting Assistant Comptroller General

Navay Lingsbury

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#### **Abbreviations**

HUD Department of Housing and Urban Development
OPM Office of Personnel Management

## Comments From the Secretary of Commerce



Mr. J. Christopher Mihm
Associate Director, Federal Management
and Workforce Issues
General Accounting Office
Washington, DC 20548

Dear Mr. Mihm:

Enclosure

The Department of Commerce appreciates the opportunity to comment on the General Accounting Office draft document entitled, 2000 Census: Contingency Planning Needed to Mitigate Formidable Risks That Threaten the Census' Success. The Census Bureau's comments on this report are enclosed.

Sincerely

William M. Daley

Enclosure

#### Comments from the U.S. Department of Commerce Bureau of the Census

U.S. General Accounting Office Report Entitled "2000 Census: Contingency Planning Needed to Mitigate Formidable Risks That Threaten the Census' Success"

Since March 1998, the General Accounting Office (GAO) has issued 12 reports on Census 2000 planning and operations. The vast majority of these reports were conducted in the spirit of cooperation in our mutual effort to ensure the success of Census 2000. In particular, investigations focused on the Census 2000 Dress Rehearsal, the development of the Census 2000 address list, plans to conduct Census 2000 without the use of statistical sampling, the scheduling of Census 2000 operations, and the rigorous assessment of the Fiscal Year 2000 Budget Amendment. All explored highly technical aspects of Census 2000 operations in a manner that highlighted the vast complexity and significant challenges inherent in conducting an effective decennial census.

This report, however, is very troubling, and it is in conflict with earlier GAO investigations, which concluded that there is little time to make final census design changes and to implement them, as Census Day approaches. It is worth pointing out that the Census Bureau recognized early in the decade that there are formidable obstacles to conducting a complete and thorough Nonresponse Follow-up (NRFU) operation. In fact, our plan to implement an Integrated Coverage Measurement operation using modern statistical sampling methodology to adjust the census counts was developed to address this problem. To be sure, it will be a challenge to complete the NRFU operation on time. It also will be difficult to hire and train the staff needed for this effort and to implement a successful outreach and promotion campaign. However, the GAO report issued in September characterized the Census Bureau's expectations of the productivity of census staff involved in the NRFU operation, as well as the effectiveness of the advertising campaign as being generally conservative. GAO's contention in the current report that the Census Bureau has not sufficiently planned for potential shortcomings in the NRFU or outreach and promotion operations, therefore, appears contradictory.

There is inconsistent analysis supporting the conclusions in the current report. In some instances, the Dress Rehearsal is used to support conclusions (for example, the Census 2000 mail response rate will be difficult to achieve). In other cases, conclusions are drawn that directly contradict the Dress Rehearsal findings. For example, the report argues that the Census Bureau will not be able to hire the requisite number of staff needed for the NRFU operation, while the Dress Rehearsal demonstrated just the opposite.

The paramount objective for the Census Bureau in the four months remaining before Census Day is to implement the integrated procedures and operations that have already been planned. The only serious contingency would be to request a supplemental appropriation. At this point, the Census Bureau cannot spend money it does not have.

# **GAO Contacts and Staff Acknowledgments**

GAO Contacts	J. Christopher Mihm, (202) 512-8676 Robert N. Goldenkoff, (202) 512-2757
Acknowledgments	In addition to those named above, Victoria Miller O'Dea, Victoria E. Miller, Lynn M. Wasielewski, Anne K. Rhodes-Kline, James M. Rebbe, Scott McNulty and Cindy S. Brown Barnes made key contributions to this report.

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